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Winter 2015

NASA Signs Lease with Planetary Ventures LLC for Use of Moffett Airfield and Restoration of Hangar One

Source: Press Release
November 10, 2014

Deal Part of Agency Effort to Reduce Costs, Surplus Property

In an effort to reduce costs and shed surplus property, NASA today signed a lease with Planetary Ventures, LLC to manage Moffett Federal Airfield (MFA), an agency facility located in Moffett Field, California, and rehabilitate its historic Hangar One. NASA estimates the lease will save the agency approximately $6.3 million annually in maintenance and operation costs and provide $1.16 billion in rent over the initial 60-year lease term.

MFA, currently maintained by NASA's Ames Research Center in Moffett Field, California, includes approximately 1,000 acres of land located on South San Francisco Bay. The land includes Hangars One, Two, and Three, an airfield flight operations building, two runways, and a private golf course.

"As NASA expands its presence in space, we are making strides to reduce our footprint here on Earth," said NASA Administrator Charles Bolden. "We want to invest taxpayer resources in scientific discovery, technology development, and space exploration – not in maintaining infrastructure we no longer need. Moffett Field plays an important role in the Bay Area and is poised to continue to do so through this lease arrangement."

Photo Source: NASA

Hangar One at NASA Research Park

After a fair and open competition, the U.S. General Services Administration (GSA) and NASA selected Planetary Ventures, LLC as the preferred lessee in February 2014 and began lease negotiations.

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Quite An Unprecedented Visit!

By: Renee Mitchell
October 20, 2014

Getting a call from the US Small Business Administration (SBA) regarding an upcoming visit from Maria Contreras-Sweet, Administrator of the SBA was a complete surprise to Renee Mitchell, President of RMV Technology Group, who happened to take the call that day. Because of the targeted focus by NASA upon high tech small business owned and run by those who have served, RMV was selected for this unprecedented visit by the SBA accompanied by a White House Press Officer and a group of no less than 15 NASA Ames staff on the 20th of October 2014. What a scene it was at the RMV lab in NRP building 19, to see so many people crowd into the lab amidst a labyrinth of test equipment, chambers, materials, and products under test. Maria Contreras-Sweet and staff came for a 15 minute photo op but stayed for over an hour!

Demonstrating to the group in a high level briefing, CEO/ Founder of RMV, Bob Vermillion effectively conveyed to Maria Contreras-Sweet the complexity of testing suspect non-compliant materials, packaging and products throughout the global supply chain that is on the rise today.

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Photo Source: SBA

Left to right: CEO Bob Vermillion of RMV, Maria Contreras-Sweet, Administrator, US SBA, Coreena Conley, Executive Director, VBOC Region IX and Renee Mitchell.

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NRP WELCOMES

AAC Microtec

Location: Building 19, Room 2086
Commencement: January 15 , 2015

AAC, a returning tenant, conducts a variety of commercial and integrated activities in the small satellite market. The company is working on the FILMSS project consortium with prime contractor Wyle. AAC along with NASA Ames built and launched TechEdSat-1. AAC is under discussions to supply standard and customized products with several companies.

Aerovar Research, LLC

Location: Building 19, Room 2023
Commencement: January 15 , 2015

Aerovar Research is a private-sector company that makes investments and funds research in the aerospace domain.

Aurora Flight Sciences

Location: Building 19, Room 1068
Commencement: January 1, 2015

Aurora's core business and product development efforts are in the areas of unmanned aircraft systems, small space systems, and other flight vehicles. Aurora supports the needs of a diverse clientele including NASA, the DoD, and many government contractors, as well as Aurora's Development and Production business sectors.

BAER Institute

Location: Building 19, Room 2007
Commencement: October 1, 2014

The Bay Area Environmental Research Institute (BAER Institute) is a California 501(c)3 nonprofit corporation dedicated to promoting and conducting research in science, particularly atmospheric and space science.

IDM Technologies

Location: Building 19, Room 1076
Commencement: January 2, 2015

IDM Technologies' mission is to develop human breath diagnostic devices. Their goal and vision is to be able to diagnose all type of diseases by monitoring biomarkers in human breath and build a breathprint as part of a health profile.

NanoRacks

Location: Building 19, Room 1070G
Commencement: October 15, 2014

Besides several commercial entities, NanoRacks is working with LLNL, NASA and CASIS to develop, place and operate cube sats. Their core business is providing turnkey plug and play microgravity research facilities allowing standardized payloads and providing interface with the ISS power and data capabilities at low cost.

Virgin America

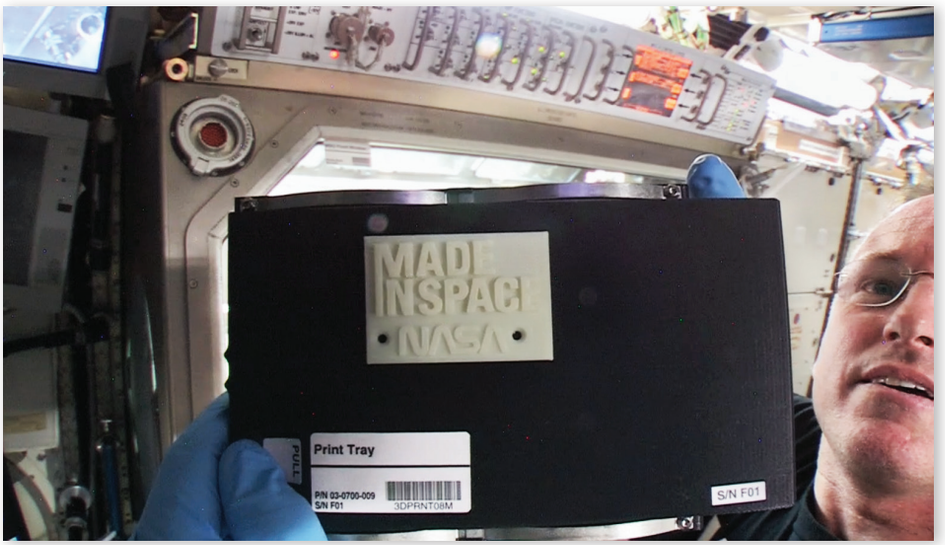
Location: Building 14
Commencement: January 15, 2015

Virgin America will be establishing a backup Flight Operations Center at NRP in correlation with their collaborative work with NASA Ames on air traffic management studies to simulate the role of the dispatcher in the Next Generation Air Transportation System (Next Gen).

NASA and Made In Space Make History By Successfully 3D Printing First Object In Space

Source: Made In Space
November 25, 2014

Photo Source: NASA



International Space Station Commander Barry "Butch" Wilmore holds up the first object made in space with additive manufacturing or 3D printing. Wilmore installed the printer on November 17th, 2014, and helped crews on the ground with the first print on November 25th, 2014.

History was made on November 24th at 9:28 pm GMT, when the first 3D printer built to operate in space successfully manufactured its first part on the International Space Station (ISS). This is the first time that hardware has been additively manufactured in space, as opposed to launching it from Earth.

"When the first human fashioned a tool from a rock, it couldn't have been conceived that one day we'd be replicating the same fundamental idea in space," said Aaron Kemmer, CEO of Made In Space, Inc. "We look at the operation of the 3D printer as a transformative moment, not just for space development, but for the capability of our species to live away from Earth." The first part made in space is a functional part of the printer itself – a faceplate for its own extruder printhead. "This 'First Print' serves to demonstrate the potential of the technology to produce replacement parts on demand if a critical component fails in space," said Jason Dunn, Chief Technical Officer for Made In Space.

For the entirety of the space program, tools and parts have been built on Earth and required a rocket to get to space.

The presence of a 3D printer onboard the ISS will allow hardware designs to be made on Earth and then digitally beamed to the space station, where the physical object will be created in a matter of hours. "For the first time, it's no longer true that rockets are the only way to send hardware to space," said Mike Chen, Chief Strategy Officer for Made In Space.

3D Printing in 'Zero-Gravity Experiment' is a technology demonstration intended to learn about additive manufacturing processes in reduced gravity. The experiment is being jointly conducted by NASA's Marshall Space Flight Center (MSFC) and Made In Space, which designed and built the unique 3D printer for NASA through their Small Business Innovation Research (SBIR) program. The printer was delivered to the ISS in September 2014, and on November 17th astronauts installed it in the station's Microgravity Science Glovebox.

"This project demonstrates the basic fundamentals of useful manufacturing in space. The results of this experiment will serve as a stepping stone for significant future capabilities that will allow for the reduction of spare parts and mass on a spacecraft, which will change exploration mission architectures for the better," said Mike Snyder, Director of R&D for Made In Space and Principal Investigator for this experiment. "Manufacturing components on demand will yield more efficient, more reliable, and less Earth dependent space programs in the near future."

The initial phase of this science experiment will see a selection of test coupons, parts, and tools printed in order to validate design, methodology and technology assumptions. Made In Space will print the same objects on their identical ground unit in order to provide a group of control prints. The ISS prints will be returned to Earth via a future return flight in order for the control prints and microgravity prints to be compared.

Once returned to Earth, the testing of the prints will provide data on a wide variety of factors, including tensile strength, torque, and flexibility. This information will allow the Made In Space team to make crucial adjustments to a second 3D printer, scheduled for delivery to the ISS in early 2015. This second printer will be an invaluable tool for astronauts and the government. It will also be available to commercial businesses and individuals on Earth to create on-demand hardware such as small satellites.

"The International Space Station has provided us with an ideal laboratory for demonstrating this game-changing technology that will not only benefit the station, but will also enable sustainable deep space missions," said Niki Werkheiser, program manager for the project at NASA's Marshall Space Flight Center in Huntsville, Alabama.

"The project also serves as a model for how NASA can work with a small business to design, test, and build tools that can transform space exploration."

Continued on **page 10**

Planetary Ventures Continued from **page 1**

The negotiated lease, which is neither a procurement action nor a government contract, will put Hangar One to new use and eliminate NASA's management costs of the airfield, with the federal government retaining title to the property.

"Hangar One is an important landmark in Silicon Valley," said GSA Administrator Dan Tangherlini. "GSA was proud to support NASA in delivering the best value to taxpayers while restoring this historic facility and enhancing the surrounding community."

Planetary Ventures currently plans to invest more than $200 million in capital improvements to the property and commits, in this lease, to several undertakings that will benefit the public upon completion, including:

Photo Source: NASA

Hangars Two and Three at NASA Research Park

- Refurbishing and protecting historic Hangar One in accordance with standards established for historic properties by the U.S. Secretary of the Interior;
- Rehabilitating historic Hangars Two and Three;
- Operating MFA in accordance with the Programmatic Environmental Impact Statement for public and private use;
- Creating an educational facility where the public can explore the site's legacy and the role of technology in the history of Silicon Valley.

"We are fortunate to have had significant input from surrounding communities on setting a future path for Moffett Field," said Ames director S. Peter Worden. "With the involvement of the citizens of Mountain View and Sunnyvale, we are confident the results will benefit all parties."

Planetary Ventures will assume operation of the site following the finalization of a joint plan with NASA, the federal Environmental Protection Agency, and California Regional Water Quality Control Board to ensure continued environmental stewardship and protection of the existing remedies of the site.

As a tenant to NASA, Planetary Ventures will be required to comply with all applicable laws, regulations, and policies, including those on topics of historic preservation, environmental compliance, security, health and safety, and airfield operations to support ongoing missions and other government objectives.

"We look forward to rolling up our sleeves to restore the remarkable landmark Hangar One, which for years has been considered one of the most endangered historic sites in the United States," said David Radcliffe, Vice President of Real Estate and Workplace Services at Google Inc.

Once renovations are complete, Hangar One will again be home to high-tech innovation as Planetary Ventures begins using the historic facility for research, development, assembly, and testing in the areas of space exploration, aviation, rover/robotics, and other emerging technologies. Hangars Two and Three will be used for similar purposes.

For more information on Moffett Field, visit: **http://historicproperties.arc.nasa.gov/history/index.html**

For information about NASA missions and programs, visit: **http://www.nasa.gov**

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RMV Technology Continued from **page 1**

Photo Source: SBA

Administrator of the U.S. SBA Maria Contreras-Sweet, her staff at SBA San Francisco, and Ames Research Center's Christine Munroe, Kelly Kaplan along with the Public Relations office visited RMV Technology Group on 20th October, 2014.

According to JPL/NASA's website, electrostatic discharge (ESD) is a $40 billion dollar problem annually. Due to improper handling, storage, and shipment of ESD devices, validation is a key prerequisite for mitigation of damage to electronics.

The RMV test laboratory conducts advanced materials and product testing (Battery Pack compliance, 3D Technology Printers, SMART Meter Failure Analysis, LED System Level Test, Photovoltaic Package Test, Conductive Coatings Test) for space technology, aerospace & defense, medical device and biotech.

To avoid, detect, or minimize potential ESD damage, RMV has developed a prototype instrument to test tribocharging of materials for future lunar explorations.

Awards for Innovation in packaging include First Place Ameristar Award for the Top Electronics Packaging Design in the USA; HP placed 2nd and 3rd, followed by Motorola in 4th place. One of Bob's material developments was approved for a NASA Mars Mission.

RMV Technology Group LLC is a Service Disabled Veteran Owned Business and Hispanic American Small Business. RMV is a 2014 graduate of the SBA 8(a) & SDB program.

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The Race to Create a Real-Life Tricorder

By Heather Kelly, CNN
September 7, 2014

In an old office building at NASA's Ames Research Center in Mountain View, California, there's a room stacked high with plastic containers of synthetic urine. Researchers dip small white paddles into the liquid, wait for a grid of squares to change colors, and snap a photo with a custom smartphone app.

It's all part of a futuristic self-diagnosis kit from startup Scanadu, which is competing to be the future of DIY health care.

Scanadu is one of 10 teams taking part in the Qualcomm Tricorder X Prize contest to create an affordable, handheld device that consumers can use to diagnose their medical conditions at home. The goal is to make a working version of Star Trek's tricorder, the television show's fictional diagnostic device. In the series, the ship's doctor would wave the portable black box over a patient's body and immediately know if a person had broken bones, a disease or if they were going to die.

The real-life tricorder must weigh less than 5 pounds, monitor five vital signs and detect 15 medical conditions. It should let people measure their own blood pressure, heart rate, temperature, oxygen saturation, and respiratory rate. Each system will be able to diagnose common health conditions including diabetes, anemia, sleep apnea, and pneumonia.

"We're asking teams to put together an aggregation of technologies that's never been done before," said Dr. Erik Viirre, the technical and medical director for the Tricorder X Prize. "We're spurring things to market faster, better, and cheaper."

The multi-year contest is run by X Prize, a nonprofit organization that attempts to accelerate major technological advances. Last week, the judges narrowed down the field of 41 teams to 10, which now have until April to create working prototypes for consumer tests. The three groups that make the most successful tricorders will split a $10 million prize.

In 2005, Walter De Brouwer's 5-year-old son jumped out of a window and fell 36 feet to the ground. After a year in emergency rooms, operating rooms and the ICU, De Brouwer had a whole new perspective on hospitals. He saw firsthand how powerless patients often were. Inspired by the less invasive medical devices from science fiction, he moved to Silicon Valley and started Scanadu.

"'Star Trek' was not TV, it was a business plan," said 57-year-old De Brouwer.

Scanadu is already close to having working prototypes of its tricorder system. In addition to the Scanaflo (a single-use urine test) the company has created the Scanadu Scout, a palm-sized disc you press to your forehead or temple for 10 seconds to take vital signs, including blood pressure, temperature, heart and respiratory rate (See image on page 9).

The readings are imported to a smartphone, analyzed and tracked over time. De Brouwer's vision is to have a constant collection of data that creates a baseline for each user. That information will allow the Scanadu app to detect issues early, even before there are noticeable symptoms.

These types of devices are not meant to replace doctors, but to fill in when in-person medical care is not available, affordable, or necessary.

Every day, Dr. Basil Harris sees patients who have waited too long to seek treatment, often because they lack insurance or a primary care giver. There's a steady stream of them at the Chicago emergency room where he works, showing up days after the first symptoms of serious illnesses.

Harris, who also has a Ph.D. in engineering, leads the Tricorder X Prize finalist team Final Frontier Medical Devices. His tricorder combines a regular tablet computer with a separate Bluetooth gadget that takes vitals and runs other tests. The companion tablet app walks the patient through the same types of questions Harris asks every patient who comes into his ER.

Photo Source: Scanadu

Scanadu's Scanaflo conducts urine tests. The results obtained are then imported into a smartphone app by taking a photo of the paddle.

Continued on **page 9**

A Revolutionary Workout Comes to Los Gatos

By Barbara Blackburn, Los Gatos Magazine
December 31, 2014

Photo Source: Vasper

Chill Workout: San Jose Sharks player Patrick Marleau is an investor in Vasper Training Systems.

It's a new year and I'm excited about something on the cutting edge of fitness and technology that has arrived in Los Gatos. Are you ready to try something new that disrupts conventional human fitness paradigms to create a completely new standard for optimizing your physical fitness and recovery?

It's Vasper Training Systems and it's being introduced exclusively at my studio, FIT EDGE in Los Gatos. Vasper, originating from "vascular performance," is a patented exercise and rehabilitation technology using the principles of compression and cooling during exercise.

Vasper allows users of almost all ages and physical abilities to achieve anaerobic exercise benefits effectively and without sweating. Those benefits are decreased body fat, increased muscle mass, bone density, improved sleep quality, increased focus, clarity of mind, faster recovery from exercise or physical injuries, relief of joint pain and increased exercise capacity.

Most of us exercise aerobically at low intensity, for a longer duration because, let's face it, a shorter, high intensity (anaerobic) sprint workout doesn't feel good. Its short bursts of maximum intensity can be painful and it comes with a lot of sweat and long recovery periods.

Studies have shown that the benefits of anaerobic exercise far outweigh the benefits of an aerobic workout. Vasper workouts allow the individual to achieve the benefits of high intensity exercise during a low impact 20-minute interval workout with minimal or zero sweat and fast recovery.

Not only does Vasper provide the healthy individual with immeasurable benefits, it has proven to have significant benefits on the rehabilitative and therapeutic populations.

Serial entrepreneur and former GE Medical Systems executive, Peter Wasowski, discovered Vasper while seeking a remedy for his own health issues.

"After moving to Hawaii from California in late 1990s," he says, "I was suffering from traumatic arthritis in both ankle joints and high blood sugar, diagnosed as pre-diabetic."

Rather than treat these symptoms with medications, he decided to design new technology to address the cause of his symptoms, he said, and undertook eight years of research, building and testing different prototypes combining the core cooling techniques of the NASA space suit's astronaut temperature control and different forms of vascular compression.

"During the first two weeks of using this device my joint pain associated with arthritis was dramatically reduced and then went away," says Wasowski. "My blood sugar levels came back to normal and I flushed my medications down the toilet. Soon my friends and neighbors learned about my device, started using it and realized similar benefits." In 2009 Vasper Systems was formed.

The Vasper Workout

Vasper workouts are done with a Nustep recumbent used in concert with Vasper cooled compression built into the bike.

You warm up 9 minutes at a low-to-moderate pace, followed by a series of high intensity sprint intervals with varying duration (30 to 60 seconds), followed by a 90-second recovery. When your workout is complete you lie down, resting on a liquid cooled table for 10 minutes.

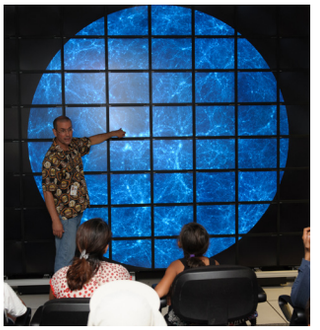
During the entire workout, liquid cooled compression cuffs concentrate the lactic acid in the muscle tissue to generate a stronger impulse to the pituitary gland, which assists with hormonal balance. The cooling element works simultaneously with the compression, keeping the core body temperature cooler during the workout.

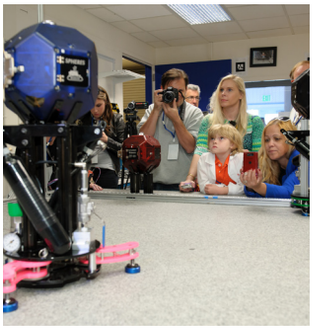
Rising body temperatures during exercise is a primary limiting factor for performance. Vasper liquid cooling simulates the effect of exercising in cool water without getting wet. Cooling during exercise also decreases pain intensity and reduces inflammation.

You can Vasper and then walk into your personal workout and experience more power and better performance.

"I know of no other exercise that provides such dramatic gains in such a short amount of time," says Dr. Jeffery Gladden, an interventional cardiologist and athlete who's been using Vasper for more than a year.

Continued on **page 9**





Partners of NASA Research Park
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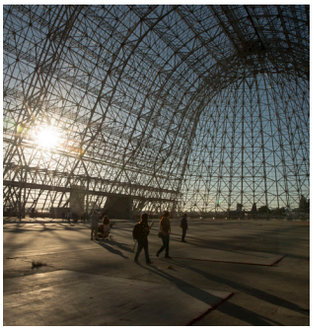


skyTran


We 3D print in space.
So can you.


NASA AMES 75 ANNIVERSARY


75
Ames

Vasper Continued from **page 6**

He is director of cardiology services at Wise Regional Hospital and John Hopkins County Memorial Hospital and director of cardiac rehabilitation at The Heart Hospital Baylor Plano, all in Texas. "It has become a cornerstone in our performance optimization programs.

"We currently have an ongoing study with cardiac rehab patients to evaluate the effects of Vasper improving cardiac performance, and we have also been using Vasper to train athletes and the general population. Vasper uniformly improves the participants' reported performance acceleration with no risk of injury. It also has been reported by many to speed the recovery of previous injuries."

When I walked into Vasper at NASA in 2012, I felt like I had been catapulted back into my Human Performance Lab at Cal Poly. My first workout on Vasper left me feeling exhilarated with an abundance of energy. As an endurance athlete, its effects on my performance and recovery have been astonishing. I have found it to be an incredible enhancing workout that has had a profound effect on my workouts and overall quality of health.

The U.S. Navy SEALS, NASA astronauts, Olympic athletes, San Jose Sharks, Stanford University athletes, Ironman athletes, aging athletes, fitness enthusiasts, cardiac patients, and those with spinal cord injuries, among other rehabilitation programs, have used Vasper.

I invite you to join us in becoming a member of the Vasper Team at FIT EDGE and make Vasper a part of your prescription for overall health.

For more information, visit:

www.fitedge.net
www.vasper.com.

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Scanadu Continued from **page 5**

Photo Source: Scanadu

Scanadu Scout, a palm-sized disc you press to your forehead or temple for 10 seconds to take vital signs.

"It does everything you would expect a normal physician to do," said Harris. "What an ER doctor does is make diagnoses. Doing that is somewhat an art and somewhat science."

His team is also working on a novel approach to a neurological exam. Using the tablet, they can test users' vision, picking up on subtle defects caused by illness. For example, if a person has suffered from a hemorrhagic stroke, they might lose some vision on just one side. The tests could detect the issue and tell the person to seek medical help immediately, cutting down on the chance of permanent disability.

Inventing a new medical device is only the first step to getting it into the hands of real people. Perhaps even more useful than the money is how the X Prize is working with the Food and Drug Administration. Getting regulatory compliance for a new product is notoriously difficult and expensive, and it requires clinical trials. But the FDA is working closely with the X Prize organization.

The X Prize will also manage the vigorous final tests that determine which devices will win. Each team must produce 30 working prototypes of their tricorders for consumer testers. They'll be used and reviewed by people who have one of the conditions the tricorders are required to detect.

The final teams hail from six countries. They include doctors, engineers, undergrads, entrepreneurs and researchers, and all have unique approaches to the technology. Many, like Scanadu, Final Frontier and Slovenian team MESI Simplifying Diagnostics, are creating small gadgets that work with existing mobile devices. Some are taking a more traditional approach with things like blood pressure cuffs and finger pricks. The Danvantri team from India is working on a low-cost device worn around the neck specifically for developing countries.

One thing they all agree on is that this technology's time is now. "This device, whether it's mine or someone else's, is coming," said Harris. "It puts the information in the hands of the consumer where they can make actionable decisions. It really levels the playing field."

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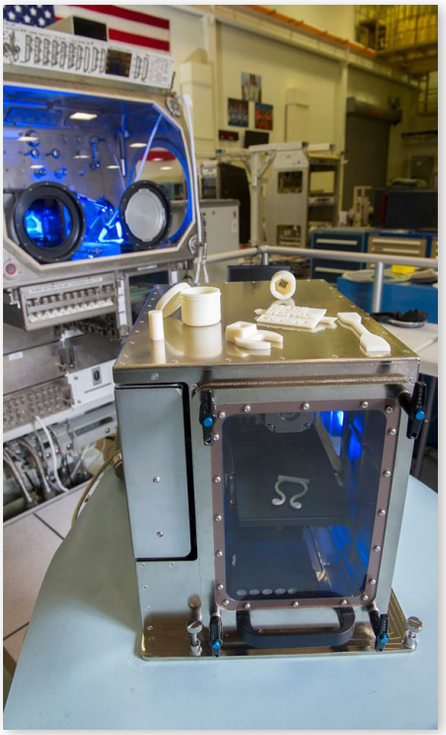
Made In Space Continued from **page 3**

Photo Source: NASA / Emmett Given



Foreground

First 3D printer by Made In Space, contracted by NASA, which launched to the International Space Station on September 21st, 2014.

Background

The Microgravity Science Glovebox that contains the printer during the 3D Printing in Zero-Gravity Experiment.

Following the initial printing phase, NASA and Made In Space will be conducting additional ongoing experiments to further test aspects of additive manufacturing onboard ISS.

"In 1957, Sputnik became the first man-made object in space and, 12 years later, that led to humans setting foot on the moon," said Kemmer. "Now, in 2014, we've taken another significant step forward – we've started operating a machine that will lead us to continual manufacturing in space. Decades from now, people will look back to this event, it will be seen as the moment when the paradigm of how we get hardware to space changed."

CMU-SV Adds 200 New Students in Fall 2014

Source: Carnegie Mellon University (CMU)

Records are made to be broken — and 2014 brings another record high for enrollment at Carnegie Mellon University's Silicon Valley campus. For the fall semester, the university's College of Engineering welcomed more than 150 new students to Silicon Valley, alongside 50 second-year bicoastal students from the Information Networking Institute. They join more than 75 students already at the SV campus to complete their master's degrees and Ph.D. studies.

"This campus is home to truly great faculty members and fascinating research projects, and it's located exactly where students want to be," said faculty member Bob Iannucci, who served as director of the Silicon Valley campus through September 2014. "It will be a very exciting year, and part of that energy comes from these fantastic incoming students."

In Fall 2013, enrollment at the 12-year-old campus topped 200 and set a record for incoming students with 133. Breaking that record only a year later "really demonstrates how much of a draw the Silicon Valley campus is for students looking at CMU's graduate engineering programs," said Lannucci.

The Department of Electrical & Computer Engineering, which hosts three programs at the SV campus, has the largest presence in the incoming class. More than 60 students are entering the MS ECE program, including some as part of the Integrated Master's/ Bachelor's program. Five new students are joining the Ph.D. program, and 34 will begin the MS Software Engineering program, which is exclusive to the SV campus.

Also exclusive to CMU-SV is the MS in Software Management, offered through the university's new Integrated Innovation Institute. "We are very excited to welcome our largest incoming full time class, 40 students representing eight different countries," said Chris Zeise, director of admissions for the SM program and the director of alumni relations for the SV campus. She also noted that women outnumber men in the full time program. An additional 16 students are starting the two-year part-time program.

Bicoastal students from the INI's MSIT-25 class will complete their two-year program in Silicon Valley following a year in Pittsburgh. Most have been in the Bay Area for summer internships and during the fall semester will work in teams on practicum projects. With the new students plus approximately 30 Ph.D. students and 50 who are continuing master's programs in SE and SM, it will be a full house this year at the campus at the NASA Research Park.

Photo Source: CMU

Orientation Ceremony at Silicon Valley Campus

NASA'S Michael Marlaire Joins Joint Venture; NASA Research Park Director to Head Special Projects

Source: Joint Venture Silicon Valley
December 2, 2014

Photo Source: NASA

Michael Marlaire, Director NRP

Joint Venture Silicon Valley announced that longtime NASA Research Park director Michael Marlaire has been detailed to Joint Venture to head special projects for the next two years.

A 28-year veteran of the space agency, Marlaire has been director of the NASA Research Park at NASA's Ames Research Center since 2006, directing partnership development, land use planning, leasing, property management and intergovernmental relations related to development.

Based in Silicon Valley since 1991, Marlaire served as NASA Ames Director of External Affairs, leading Ames partnerships with regional academic, business and political leaders while developing what became the NASA Research Park.

"I am so excited to be working with the leading Silicon Valley organization that's addressing the many issues facing our quality of life," said Marlaire. "I hope my long experience in the valley will be an immediate asset to pursuing Joint Venture's goals."

"Michael Marlaire's vast experience, knowledge and relationship building skills are a perfect fit for Joint Venture and the collaborative work we do," said Russell Hancock, CEO of Joint Venture. "We're fortunate to have him on our team." Marlaire has been a member of Joint Venture's Climate Prosperity task force since 2008 and has consulted with the organization on disaster preparedness and other regional initiatives. Marlaire also serves on the NOVA Workforce Investment Board since 2003.

Marlaire, who has received numerous honors for his work with NASA including the Outstanding Leadership Medal, previously worked on the U.S. Senate Judiciary and Appropriations Committees in Washington, D.C. He joined the federal government at NASA headquarters in 1986 as a Presidential Management Fellow.

He holds a law degree, master's degrees in public financial administration and American history and a bachelor's degree in history and political science, all from Southern Illinois University.

About Joint Venture Silicon Valley

Joint Venture Silicon Valley was established in 1993. A non-profit organization, the group convenes the region's leaders across every major sector – government, business, academia, labor, and community organizations. The organization provides data and analysis on our region's challenges, and leads initiatives to address those challenges. Joint Venture is funded by cities and counties, local companies, colleges and universities, labor and workforce institutions and foundations.

For more information, visit: **www.jointventure.org**.

Photo Source: Joint Venture

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reQall's CEO on 'Reqallable InCar to Help Reduce Distracted Driving'

Source: Press Release, Telematics Wire

reQall has recently introduced its reqallable InCar (beta), the first context-aware app to intuitively decrease phone related text and email distractions while driving. The new app works by detecting a user's Bluetooth connection and launching the phone into reqallable InCar mode, which prompts the handset to acknowledge notifications only from priority contacts, highlight and read aloud critical details within incoming emails and texts, and enable voice activated replies for safer, smarter InCar phone use.

reQall's CEO, Rao Machiraju, briefly discussed and opined over its recently released InCar application. The thoughts and responses are summarized below for a good reckoning and understanding of our readers.

Rao Machiraju is the Co-founder and CEO of reQall Inc., an MIT Media Lab spin off and a NASA Research Park Partner. Rao Machiraju, was a Principal Scientist at Apple Inc., heading various groups including 'The Advanced Technology Group (ATG) Learning Communities Laboratory'. Rao Machiraju and his team have won the 1993 Optimas Award for Innovation and Excellence for Apple Inc. Rao Machiraju also was a Co-founder of ConceptLabs.

Rao Machiraju is an Indian American Scientist and holds 10 patents in information retrieval. He has an interdisciplinary educational background.

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Battelle and Rhombus Join to Offer Nuclear Security Solutions

Source: Press Release, Market Wired
December 4, 2014

Teaming combines Rhombus' breakthrough nuclear detection products with Battelle's extensive system engineering and service delivery capabilities in CBRNE defense

Battelle, the world's largest non-profit research and development organization and Rhombus Power Inc., a Silicon Valley startup located in the NASA Research Park, today announced they have teamed to offer solutions to the Department of Defense for the Man-Portable Radiation Detection System (MRDS) program.

An important role of the United States military is to locate and disable or destroy the enemy's radiological and nuclear capabilities. The MRDS program will provide necessary detection capabilities to specialized Weapons of Mass Destruction (WMD) teams and facilitate the flow of critical information on an adversary's WMD program.

Battelle's full-spectrum capabilities in Chemical, Biological, Radiological, Nuclear, Explosives (CBRNE) defense are unique to this industry. A key asset is a world-renowned core of scientists and engineers who have met the challenge of reducing CBRNE threats by employing the latest technologies and a systems engineering-based approach toward effectively meeting the nation's security needs.

"Rhombus' unique nuclear detection platform complements our portfolio of products and services for the government," said Matt Shaw, General Manager of Battelle's CBRNE Defense business. "We look forward to working together with Rhombus on this important radiation and nuclear detection issue."

Rhombus founder and CEO, Dr. Anshu Roy, said, "Our proprietary, solid state nuclear-detection platform is a valuable add-on to Battelle's unmatched suite of capabilities and distinguished heritage dating back to the Manhattan Project. Together we will offer easy-to-use, scalable, and reliable nuclear detection solutions to the Department of Defense."

About Battelle

Every day, the people of Battelle apply science and technology to solving what matters most. At major technology centers and national laboratories around the world, Battelle conducts research and development, designs and manufactures products, and delivers critical services for government and commercial customers. Headquartered in Columbus, Ohio since its founding in 1929, Battelle serves the national security, health and life sciences, and energy and environmental industries.

For more information, visit: **www.battelle.org**.
For more information contact Katy Delaney at (614)424-7208 or at delaneyk@battelle.org or contact T.R. Massey at (614) 424-5544 or at masseytr@battelle.org

About Rhombus

Rhombus Power has developed a highly accurate, easy to use, and scalable platform for detecting sub-atomic particles - ranging from neutrons to photons. Its first product, Mercury, is a correlated neutron and gamma detector for security, intelligence and defense markets. The company is based in the NASA Research Park in Moffett Field, CA.

For more information, visit: **www.rhombuspower.com**
or send an email to pr@rhombuspower.com ■

Beata Stylianos, CEO of Mission Critical Technologies, attends White House Summit

Source: Mission Critical Technologies (MCT)

Beata Stylianos, CEO of MCT, a Los Angeles-based technology solutions company, attended the White House Summit on Working Families in Washington, D.C. Attendees included President Barack Obama, First Lady Michelle Obama, Goldman Sachs CEO Lloyd Blankfein, Secretary of Labor Thomas Perez as well as other policy experts, business and academia leaders, other government officials and interested individuals.

"This is the second time MCT was invited by the White House Small Business Council - the first time was the summit regarding Mental Healthcare in 2013. It is an honor that we are once again recognized as being at the forefront

Photo Source: MCT

Beata Stylianos, CEO of MCT

(of the supporting working families initiative)," said Stylianos.

The Summit specifically focused on creating strategic efforts to support America's evolving workplace and the increased role of women in working families. Some key topics that were discussed included flexibility, pay equality, discrimination, low-wage employee opportunities, care of the elderly, childcare, early childhood education in the workplace, and employee retention and promotion.

As CEO of MCT and a single parent herself, Stylianos understands the importance of flexibility and adaptability in the workplace. She believes that continuing this dialogue between the government and business officials will provoke necessary changes, ensuring more top talent retention and benefits, as well as greater economic security for American families.

"This summit is a movement, not a single day. MCT will use its experiences and the information gathered at the Working Families Summit to put these programs into action both internally and with our clients. Respecting and valuing families is something, as Americans, we can all agree on, and as a small business owner, I am excited for MCT to contribute to public policy discussion," Stylianos said. ■

reQall Continued from **page 11**

He has a Masters in Public Health (M.P.H. from California State University, Northridge), General Systems and Information Networks (Certificate from United Nations Institute for Training and Research, University of Stockholm and UCLA), and Ed.D in Instructional Technology (Doctorate from University of Southern California). Rao Machiraju worked on a number of research and development efforts in information retrieval, organizational memory, wrote a number of articles and also lectured extensively. In 1996, the term "location sense" was coined by Rao Machiraju to refer to a capability of a device that can ascertain its location. Rao Machiraju was also on the editorial boards of Journal of Expert Systems and Journal of Telematics and Informatics as a Founding member. He was also on the Board of Councilors of National Science Foundation Engineering Research Center on Multi-Media Computing in (Integrated Media Systems Center) at the University of Southern California, and serves on the Advisory Board of Dimagi.com, an MIT Medialab spin off.

Q. Tell us something about reQall's areas and business of operations and its context aware, intelligent products?

reQall is a global company. reQall's singular mission is to transform the messaging experience—one that fundamentally improves peoples lives by contextually minimizing interruptions, saving people time, and reducing the daily deluge of messages. reQall's Intelligent Inbox Assistant Reqallable (http://www.reqallable.com/) automatically distills all incoming messages (email and text) into just the ones that are important, contain actionable content, and merit attention. We focus on identifying actionable, attention worthy content from messages. The entire technology is flexible enough to run entirely on the device or the cloud. This experience can be embedded into any connected device (mobile phones, cars, wearables, smart TVs etc.).

Q. Please give a brief overview on how reqallable InCar (beta) will contribute to reduce phone, text and email distractions while driving?

Photo Source: reQall

reQall's CEO Rao Machiraju

Reqallable InCar on Android prioritizes messages from important contacts, and then distills the content to just the parts you need to take action on. These email or text messages are automatically read out to you, and the user has the option to respond by simply speaking. This means fewer interruptions while you are driving, and you don't have to worry about missing important emails or fret about not being able to answer. The driver can keep his or her eyes on the road and hands on the steering wheel. It is available in beta now and can be downloaded from: https://play.google.com/store/search?q=reqallable%20In-car. This 90 second video will give you a good sense of the experience: https://www.youtube.com/watch?v=-znld-cG8IOQ. All interactions are via voice. The most important people, the email action items that are important, directions to the next destination (based on the address shown in the calendar entry) and a microphone icon are included.

Q. Transportation Department wants to regulate navigation apps and aids to arrest distracted driving. Do you think the new app would be in compliance with this regulation?

In the US, 40% of drivers use cell phones for texting while driving and 60% use cell phones while driving (http://www.stoptextsstopwrecks.org/#facts). During the course of the day, the average person checks a cell phone approximately 110 times and up to every 6 seconds in the evening! During driving it is hard to break that ingrained habit. reqallable InCar makes use of smart phones in the car safer than current practices of people who use their phones to read emails and text while driving.

What we aimed for is a "no glance" experience so that the driver can keep hands on the wheel and eyes on the road. The laws that restrict cell phone use in the cars varies from state to state. reqallable InCar puts safety first and helps reduce the distracted driving of current driver behavior. (http://en.wikipedia.org/wiki/Restrictions_on_cell_phone_use_while_driving_in_the_United_States).

Q. reqallable InCar comes on the heels of Google Glass and smartwatch app launches by reQall, how is the new app benefiting the infotainment industry?

Reqallable InCar is a completely voice driven experience and maintains the connected experience. Many people regard email and text communications as an essential to have service. Much of what is currently available in the infotainment industry is a nice to have.

Q. How do you think the InCar apps are making headway worldwide? What are the services that are getting traction amongst users?

I think the most essential InCar apps are navigation and communications (email and texting) followed by giving the user the awareness of what is around their location in terms of services such as food, shopping and such.

The traction is significant for navigation and for location based services. The ability to receive email and texts as

well as the ability to communicate via email and text in a safe manner will be widely adopted. Hence it is our significant investment in this area. In the future, I anticipate tighter integration with vehicle sensors to offer added services will be the norm.

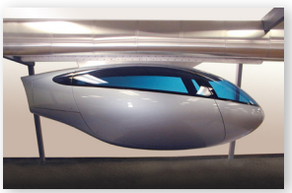
Q. What are the future plans and mandates of the company with respect to telematics and InCar applications?

We intend to continue to tightly integrate our context based email and communication services into automobiles as well as with wearables and other devices. We would like to deploy our technology as part of the Internet of Things wherein every device is connected and offers value added services. ■

SkyTran will also run in Patna, Capital of Bihar along with Metro and Monorail

Source: Press Release, Dainik Bhaskar

Photo Source: NASA



SkyTran Prototype

The Department of Urban and Housing Development is planning to operate SkyTran, Metro and Monorail under a public/private partnership model in Patna, the capital of Bihar. They have submitted a proposal, in this regard, to the Chief Minister. Given the geographical location of Patna, the Department of Development believes that it will be possible to operate all three here.

Urban and Housing Development Minister, Mr. Samrat Chaudhury pointed out that the means of transportation that provides maximum comfort to the passengers of Patna, will be expanded further. The routes of all the three trains have been fixed. SkyTran will run in greater Patna region. After a board meeting all the companies that bid, will be handed the responsibility of running SkyTran, Metro and Monorail.

To run SkyTran in Patna, a detailed report about it has been prepared. This report is also supplemented by a technical feasibility report. A meeting will be held on November 13th, 2014 with the Chief minister, to consider these reports.To operate Metro Rail, the decision to form SPV was made. Rights, has quoted a price of Rupees 14 thousand crores, for the operation of metro alone.

Reports about the estimated number of travelers for Metro, assigned route, proposed station, depot maintenance, power availability, environmental and social impact assessment of the project, estimated cost and financial impact have already been submitted.

According to Mr. Samrat Chaudhury, proposal to operate Metro, Mono and SkyTran has already been prepared and sent to the Chief Minister for further deliberation. The focus of this scheme is to run all three – SkyTran, Monorail and Metro via public/private partnership. ■

Visit by General Sir Richard Barrons, Commander UK Joint Forces

Photo Source: NASA

Deputy Center Director Lew Braxton with General Sir Richard Barrons, Commander UK Joint Forces, at a briefing hosted by NRP Director Michael Marlaire.

Polish Trade Delegation Visits NRP

Photo Source: NASA

Mejghan Haider, Deputy Director for NASA Research Park briefed the Polish Trade Delegation on NRP partnerships, November 20th 2014.

NRP POST

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